

**United States Environmental Protection Agency
Region 1
One Congress St., Suite 1100
Boston, Massachusetts 02114-4023**

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT NO: **MA0022705**

PUBLIC NOTICE DATES:

NAME AND ADDRESS OF APPLICANT:

**William J. Gould Associates, Inc.
P.O. Box 157
100 Gould Road
Monterey, MA 01245**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Gould Farm Wastewater Treatment Facility
100 Gould Road
Monterey, MA 01245**

RECEIVING WATER: **Rawson Brook (Housatonic River Watershed)**

CLASSIFICATION: **B – Warm Water Fishery**

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I. PROPOSED ACTION

The above named applicant has applied to the U.S. Environmental Protection Agency (EPA) for re-issuance of their National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water, Rawson Brook (Figure 1). The existing permit was issued on August 14, 1975 and expired on July 1, 1980. A timely reapplication was submitted and the 1975 permit was administratively continued pursuant to 40 CFR § 122.6. Due to the amount of time that had passed since the submittal of the reapplication, EPA requested an updated application in November 2004, which was received on January 4, 2005. The draft permit, after it becomes effective, will expire five (5) years from the effective date.

II. TYPE OF FACILITY AND DISCHARGE LOCATION

Gould Farm is a residential psychiatric rehabilitation facility situated on 650 acres of farmland and woodland in the Town of Monterey, in western Massachusetts. An on-site secondary wastewater treatment plant is engaged in the collection and treatment of wastewater from the residential, community, and office buildings. The design flow of the wastewater treatment facility is 0.012 million gallons per day (MGD), although the average daily flow submitted in the application is 0.005 MGD. The treatment facility consists of a series of three facultative aerobic lagoons that serves a population of approximately 100 (residents and staff). The treated effluent is discharged into Rawson Brook (Figure 1). The proposed limitations on page 2 of the draft permit are based on the facility's annual average design flow of 0.012 MGD. The average monthly flow limit of 0.012 MGD in the previous permit has been maintained in the draft permit.

The facility's discharge outfall is listed below:

<u>Outfall</u>	<u>Description of the Discharge</u>	<u>Outfall Location</u>
001	Treated effluent	Rawson Brook

III. DESCRIPTION OF THE DISCHARGE

A quantitative description of the discharge in terms of significant effluent parameters based on recent monitoring data is shown in **Attachment A** of this fact sheet.

IV. LIMITATIONS AND CONDITIONS

The effluent limitations and monitoring requirements may be found in the draft NPDES permit.

V. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMIT DERIVATION

A. Process Description

Sanitary wastewater from the residential, office, and community buildings of Gould Farm flows via a gravity sewer to three waste stabilization ponds (facultative aerobic lagoons) which are

operated in series. The intended design of this lagoon system is such that the natural biological processes occurring within the lagoon consume the sludge generated during the treatment process. There is no mechanical aeration of the wastewater (aeration is provided by ambient wind action) and no additional treatments are employed. The secondary treated effluent from lagoon 3 (final effluent) is disinfected year-round with sodium hypochlorite (added manually via a drip system), monitored for flow (V-notch weir), sampled prior to entering the outfall pipe, and is then discharged through outfall number 001 into Rawson Brook.

B. Effluent Limitations and Monitoring Requirements

1. Overview of Federal and State Regulations

EPA is required to consider both technology and water quality requirements when developing permit effluent limits. Technology-based effluent limits represent the minimum level of control that must be imposed on a particular industry or process under Sections 402 and 301 (b) of the Clean Water Act (CWA) (see 40 CFR § 125 Subpart A) to meet Best Practicable Control Technology Currently Available (BPT), Best Conventional Control Technology (BCT) for conventional pollutants and Best Available Technology Economically Achievable (BAT) for toxic pollutants. EPA has not established technology-based limits for privately owned facilities which treat domestic sewage. There are however technology-based limitations for publicly owned treatment works (POTWs), which require that these facilities achieve effluent limitations based on secondary treatment. In accordance with Section 402(a)(1) of the CWA and 40 CFR § 125.3, in the absence of national standards, EPA is authorized to use Best Professional Judgment (BPJ) to establish effluent limitations. The wastewater treatment system at Gould Farm processes the same type of waste as POTWs (domestic wastewater) and uses a technology approved for POTWs (waste stabilization ponds). Therefore, using BPJ, the technology-based effluent limits included in the Gould Farm draft permit are based upon the POTW technology-based standards set forth at 40 CFR § 133.102 and include mass limits as required by 40 CFR § 122.45(f).

EPA regulations require NPDES permits to contain effluent limits more stringent than technology-based limits when more stringent limits are necessary to maintain or achieve state or federal water quality standards.

Under section 301(b)(1)(c) of the CWA, discharges are subject to effluent limitations based on water quality standards. The Massachusetts Surface Water Quality Standards requirements (see 314 CMR 4.00) for the regulation and control of toxic constituents and EPA criteria, established pursuant to section 304(a) of the CWA, shall be used when determining effluent limitations unless site-specific criteria are established. The State will limit or prohibit the discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained.

The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that will cause, has the reasonable potential to cause, or contribute to an excursion above any State water quality

standard, including State narrative criteria for water quality (40 CFR § 122.44(d)). An excursion occurs if the projected or actual instream concentrations exceed the applicable criterion. In determining reasonable potential, EPA considers existing controls on point and non-point sources of pollution, variability of the pollutant in the effluent, sensitivity of the species to toxicity and, where appropriate, the dilution of the effluent in the receiving water.

2. Water Quality Standards; Designated Uses; Outfall 001

Rawson Brook flows into the Konkapot River, which flows southward from Monterey through New Marlborough and into Connecticut for a short distance before reentering Massachusetts and flowing into the Housatonic River in Sheffield. The Massachusetts Water Quality Standards have designated these waters as Class B – Warm Water Fisheries (314 CMR § 4.06, Table 3). Class B waters are designated in 314 CMR § 4.05(3)(b) as having the following uses: (1) habitat for fish, other aquatic life, and wildlife; (2) primary and secondary contact recreation; (3) a source of public water supply (i.e., where designated and with appropriate treatment); (4) suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses; and (5) will have consistently good aesthetic value.

A warm water fishery is defined in the Massachusetts Surface Water Quality Standards (314 CMR 4.02) as waters in which the maximum mean monthly temperature generally exceeds 20° Celsius during the summer months and are not capable of supporting a year-round population of cold water stenothermal aquatic life.

Section 305(b) and Section 303(d) of the CWA requires that states complete a water quality inventory and develop a list of impaired waters. Specifically, Section 303(d) of the CWA requires states to identify those waterbodies that are not expected to meet surface water quality standards after implementation of technology-based controls and, as such, require the development of a total maximum daily load (TMDL). In Massachusetts, these two evaluations have been combined into an Integrated List of Waters. The integrated list format provides the status of all assessed waters in a single multi-part list. The Massachusetts Year 2004 Integrated List of Waters (Section 303(d) List) lists the segment of the Konkapot River (MA21-25) into which Rawson Brook flows as a Category 5 water (waters requiring a TMDL). The pollutants causing the impairments and needing a TMDL are listed as metals. Per conversation with MassDEP, it was determined that the specific metal causing the impairment is mercury, which enters the river through atmospheric deposition. Due to the treatment system at Gould Farm and the small volume of their discharge, the Agencies (EPA and the Massachusetts Department of Environmental Protection (MassDEP)) do not believe that Gould Farm contributes to this impairment.

Available Dilution

Water quality-based limitations are established with the use of a calculated available dilution of the effluent. Massachusetts water quality regulations require that the available effluent dilution be calculated based upon the 7Q10 low flow of the receiving water (314 CMR § 4.03 (3)(a)). The 7Q10 low flow is the mean low flow over seven consecutive days, recurring every ten years. The 7Q10 low flow for the section of Rawson Brook into which the Gould Farm effluent is

discharged is 0.29 cubic feet per second (cfs). This value was determined by a computer modeling program developed by the U.S. Geological Survey known as StreamStats.

The design flow for the Gould Farm wastewater treatment system is 0.012 MGD. Multiplying the design flow (MGD) by a conversion factor of 1.55 yields the design flow of the facility in cubic feet per second (cfs) as follows:

$$\text{Design Flow: } 0.012 \text{ MGD} * 1.55 = 0.019 \text{ cfs}$$

Using the 7Q10 flow and the daily average design flow, the dilution of the effluent was calculated to be 16.26 as summarized below:

$$\text{Dilution} = \frac{7Q10 + \text{Daily average effluent design flow}}{\text{Daily average effluent design flow}}$$

$$\text{Dilution} = \frac{0.29 \text{ cfs} + 0.019 \text{ cfs}}{0.019 \text{ cfs}} = 16.26$$

Flow

The average monthly flow limit of 0.012 MGD in the previous permit has been maintained in the draft permit. This limit is based on the 0.012 MGD design flow of the facility as required by 40 CFR § 122.45(b). Flow shall be measured once (1) per day, five days per week.

Outfall 001: Conventional Pollutants

Biochemical Oxygen Demand (BOD₅)

As described earlier, EPA has made a BPJ determination to use the secondary treatment requirements found at 40 CFR §133 as the technology-based limitations for this discharge.

The secondary treatment limitations found at 40 CFR § 133.102(a) state that the 30-day average concentration for BOD₅ shall not exceed 30 mg/l, and the seven (7) day average BOD₅ concentration shall not exceed 45 mg/l. These limits have therefore been included in the draft permit. The draft permit includes a requirement to monitor for BOD₅ twice (2) per month.

Total Suspended Solids (TSS)

As described earlier, EPA has made a BPJ determination to use the secondary treatment requirements found at 40 CFR §133 as the technology based limitations for this discharge

The secondary treatment limitations found at 40 CFR § 133.102(b) state that the 30-day average concentration for TSS shall not exceed 30 mg/l, and the 7-day average TSS concentration shall not exceed 45 mg/l. The draft permit includes a requirement to monitor for TSS twice (2) per month.

BOD₅ and TSS Mass Loading Calculations

As required in 40 CFR §122.45(f), limits for BOD₅ and TSS are expressed in terms of mass (lbs/day). Calculations of maximum allowable loads for average weekly and average monthly BOD₅ and TSS are based on the following equation:

$$L = C \times DF \times 8.34$$

Where:

L = Maximum allowable load in lbs/day

C = Maximum allowable effluent concentration for reporting period in mg/l.
Reporting periods are average monthly and average weekly.

DF = Design flow of the facility in MGD.

8.34 = Factor to convert effluent concentration in mg/l and design flow in MGD to lbs/day.

BOD₅**30-day Average**

$$30 \text{ mg/l} \times 0.012 \text{ MGD} \times 8.34 = 3.0 \text{ lbs/day}$$

7-day Average

$$45 \text{ mg/l} \times 0.012 \text{ MGD} \times 8.34 = 4.5 \text{ lbs/day}$$

TSS**30-day Average**

$$30 \text{ mg/l} \times 0.012 \text{ MGD} \times 8.34 = 3.0 \text{ lbs/day}$$

7-day Average

$$45 \text{ mg/l} \times 0.012 \text{ MGD} \times 8.34 = 4.5 \text{ lbs/day}$$

Eighty-Five Percent (85%) BOD₅ and TSS Removal Requirement

The provisions of 40 CFR § 133.102(3) requires that the 30-day average percent removal for BOD₅ and TSS be no less than 85%. This limit is maintained in the draft permit.

pH

The pH limits proposed in the draft permit are based on the Class B Water Quality Standards found at 314 CMR § 4.05(3)(b)(3) and are at least as stringent as the pH limitations set forth at 40 CFR § 133.102(c). Class B waters shall be in a range of 6.5 through 8.3 Standard Units (SU) and not more than 0.5 Standard Units outside the background range. There shall be no change from background conditions that would impair any use assigned to this class. The proposed monitoring frequency for pH in the draft permit is once (1) per day, five days per week.

Fecal Coliform Bacteria

The numerical limitation for fecal coliform bacteria are based upon state certification requirements under Section 401(a)(1) of the CWA, as described at 40 CFR § 124.53 and 124.55. These limitations are also in accordance with Massachusetts Surface Water Quality Standards found at 314 CMR § 4.05(3)(b)(4).

The proposed limits in the draft permit are 200 colony forming units (cfu) per 100 ml average monthly and 400 cfu per 100 ml maximum daily. The proposed monitoring frequency for fecal coliform bacteria in the draft permit is set at two (2) days per week. Sampling for fecal coliform bacteria shall be conducted concurrently with two of the total residual chlorine samples.

Total Coliform Bacteria

The monitoring requirements for total coliform bacteria have been removed from this permit because they are longer required for state certification under Section 401 of the CWA.

Settleable Solids

The monitoring requirements for settleable solids have been removed from this permit because they are no longer required as a condition for state certification under Section 401 of the CWA.

Outfall 001 – Non-Conventional Pollutants

Total Residual Chlorine (TRC)

The draft permit contains total residual chlorine limitations which are based upon state water quality standards (Title 314 CMR 4.05(5)(e)) and the State's Implementation Policy for the Control of Toxic Pollutants in Surface Waters, February 23, 1990. Chlorine compounds produced by the chlorination of wastewater can be extremely toxic to aquatic life. As such, the permittee should evaluate chlorination alternatives such as ultraviolet disinfection, as well as state of the art chlorination facilities which enable adequate control over chlorine dosing levels. Given the limitation of grab samples for ensuring that chlorine limits are complied with at all times, future permits may require continuous chlorine monitoring to assure that toxic levels are not discharged to the receiving water.

The water quality standards for chlorine defined in the 2002 EPA National Recommended Water Quality Criteria for freshwater are 19 µg/l daily maximum and 11 µg/l monthly average in the receiving water. Given the dilution of the effluent of 16.26, total residual chlorine (TRC) limitations were calculated as 0.309 mg/l acute (daily maximum) and 0.179 mg/l chronic (monthly average) using the following equations:

TRC Calculations:

$$\begin{aligned} (\text{Acute Criteria} * \text{Dilution Factor}) &= \text{Acute Limit (Maximum Daily)} \\ (0.019 \text{ mg/l} * 16.26) &= 0.309 \text{ mg/l} \end{aligned}$$

$$\begin{aligned} (\text{Chronic Criteria} * \text{Dilution Factor}) &= \text{Chronic Limit (Average Monthly)} \\ (0.011 \text{ mg/l} * 16.26) &= 0.179 \text{ mg/l} \end{aligned}$$

The proposed TRC monitoring frequency in the draft permit is set at two (2) per day, five days per week. Two of the TRC samples are to be collected concurrently with the fecal coliform samples.

Metals: Copper

The Massachusetts Water Quality Standards include requirements for the regulation and control of toxic constituents and also require that EPA criteria established pursuant to Section 304(a) of the CWA shall be used unless site-specific criteria are established.

Copper can be toxic to aquatic life in low concentrations. Many facilities treating domestic wastewater have concentrations of copper in their effluent that would exceed a limitation calculated using a dilution factor of one.

In the absence of copper data from this facility, the draft permit includes a requirement for the permittee to conduct quarterly copper monitoring for one year. If, after one year of monitoring, the data reveals that a reasonable potential exists for this discharge to cause or contribute to an exceedance of the state criteria for copper as defined at 40 CFR § 122.44(d), the permit will be reopened and monitoring continued and/or effluent limits established. If the data does not show reasonable potential, monitoring can be discontinued.

Phosphorus

The Massachusetts Surface Water Quality Standards (314 CMR 4.00) do not contain numerical criteria for Total Phosphorus. The narrative criteria for nutrients are found at 314 CMR 4.05(5)(C), which state that “nutrients shall not exceed the site specific limits necessary to control accelerated or cultural eutrophication”. The standards also require that “any existing point source discharges containing nutrients in concentrations which encourage eutrophication or growth of weeds or algae shall be provided with the highest and best practicable treatment to remove such nutrients” (314 CMR 4.04).

Rawson Brook and the Konkapot River (into which Rawson Brook flows) are not listed as being impaired for nutrients. However, given the relatively low dilution factor, a year-round monitoring requirement for total phosphorus is proposed in the draft permit in order to evaluate the potential for the discharge to contribute to eutrophication. The proposed monitoring frequency for total phosphorus is set at twice (2) per month.

The draft permit also includes a winter (November 1-March 31) monitoring requirement for dissolved ortho-phosphorus. Monitoring for dissolved ortho-phosphorus is necessary to identify whether the particulate fraction remains low and to further understand the physical dynamics of phosphorus in the non-growing season. The proposed monitoring frequency for ortho-phosphorus is set at twice (2) per month.

Whole Effluent Toxicity (WET) - Outfall 001

Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts. The Massachusetts Surface Water Quality Standards requires that all surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife (314 CMR § 4.05(5)(e)).

National studies conducted by the EPA have demonstrated that domestic sources contribute toxic constituents to POTWs. These constituents include metals, chlorinated solvents, aromatic hydrocarbons and others. Based on the potential for toxicity resulting from domestic sewage and in accordance with EPA national and regional policy, the draft permit includes chronic and acute toxicity monitoring requirements and limitations (See “Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants”, 50 Fed.Reg. 30784 (July 24, 1985); see also, EPA’s “Technical Support Document for Water Quality Based Toxics Control”, September, 1991).

The Commonwealth of Massachusetts’ current toxics policy, “Implementation Policy for the Control of Toxic Pollutants in Surface Waters”, February 23, 1990, requires toxicity testing for all discharges with dilutions less than or equal to 100.

The principal advantage of Whole Effluent Toxicity (WET) testing are: (1) the effects of complex discharges of many known and unknown constituents can be measured only by biological analyses; (2) the bioavailability and any synergistic effects of pollutants are best measured by toxicity testing; and (3) pollutants for which there are inadequate chemical analytical methods or criteria can be addressed.

For all of the above reasons, toxicity testing is being used in conjunction with pollutant-specific control procedures to control the discharge of toxic pollutants.

The draft permit includes a requirement for chronic WET testing two (2) times per year using two freshwater test species: *Ceriodaphnia dubia* (daphnid) and *Pimephales promelas* (fathead minnow). Each test shall include the use of these two species in accordance with the EPA Region 1 protocol found in **Attachment A** of the draft permit. The draft permit requires that the permittee conduct the WET tests during the months of July and October in order to gauge the

toxicity of the effluent during the times of the year the receiving water is expected to experience low flow conditions.

As a condition of this permit, the testing requirements may be reduced if certain conditions are met. The permit provision anticipates that the permittee may wish to request a reduction in the WET testing. After one (1) year of WET tests demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may submit a written request to the EPA seeking a review of toxicity test results. EPA will review the test results and pertinent information to make a determination regarding a reduction in the WET testing requirements. The permittee is required to continue testing at the frequency and with the species specified in the permit until the permit is either formally modified or until the permittee receives a certified letter from the EPA indicating a change in the permit conditions.

VI. SLUDGE

Section 405(d) of the CWA requires that EPA develop technical standards regarding the use and disposal of sewage. These regulations are found at 40 CFR § 503 and apply to any facility engaged in the treatment of domestic sewage. The CWA further requires that these conditions be implemented through permits.

The design of the lagoon systems employed by the Gould Farm WWTF is such that the naturally occurring biological processes consume any sludge generated during treatment. The conditions in the draft permit satisfy the requirements of Section 405(d) of the CWA.

VII. ANTI-BACKSLIDING

A permit may not be renewed, reissued, or modified with less stringent limitations or conditions than those contained in the previous permit unless it is in compliance with the anti-backsliding requirement of the CWA. Anti-backsliding, as defined at 40 CFR §122.44(1)(1), requires reissued permits to contain limitations, standards, or conditions at least as stringent as those of the previous permit unless the circumstances allow application of one of the defined exceptions to this regulation. Anti-backsliding does not apply when changes to limits are based on new information not available at the time of the previous permit resissuance (40 CFR § 122.44 (1)(2)(i)(B)(1)) or when limits are changed as a result of material and substantial additions or alterations to the permitted facility which occurred after permit issuance which justify the application of less stringent limitations, as defined at 40 CFR § 122.44(1)(2)(i)(A). None of the exceptions to this anti-backsliding requirement as defined at 40 CFR § 122.44(1)(2)(i) apply to the Gould Farm facility. Therefore, all of the effluent limits in the reissued permit must be at least as stringent as those of the current permit.

VIII. ANTI-DEGRADATION

It is the goal of the CWA and EPA to achieve and maintain water quality which provides for the protection and propagation of fish, shellfish and wildlife, and provides for recreation in and on the water. Federal regulations found at 40 CFR § 131.12 require states to develop and adopt an anti-degradation policy which will ensure that once a use is achieved it will be maintained. In

Massachusetts, the anti-degradation policy is found at 314 CMR § 4.04. This regulation requires that all existing uses and the level of water quality necessary to protect the existing uses of Rawson Brook shall be maintained and protected. This draft permit has discharge limits at or more stringent than the current permit with the exception of settleable solids and total coliform bacteria, which have been eliminated from the permit because they are no longer required as conditions for state certification under Section 401 of the CWA. There have been no changes to the location of the outfall.

IX. ESSENTIAL FISH HABITAT DETERMINATION (EFH)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, "may adversely impact any essential fish habitat" (16 U.S.C. § 1855(b)). The Amendments broadly define "essential fish habitat" (EFH) as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. § 1802(10)). Adversely impact means any impact which reduces the quality and/or quantity of EFH (50 CFR § 600.910(a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Essential Fish Habitat is only designated for fish species for which federal fisheries management plans exist (16 U.S.C. § 1855(b)(1)(A)). EFH designations for New England were approved March 3, 1999. The discharge of 0.012 MGD from the Gould Farm wastewater treatment facility into Rawson Brook, which flows into the Konkapot River before joining the Housatonic River, is approximately 85 miles from the nearest designated EFH (where the Housatonic empties into Long Island Sound). It is EPA's opinion that consultation with NMFS is not required because the authorized discharge is not likely to adversely affect any federally managed species and/or their habitat.

X. ENDANGERED SPECIES ACT (ESA)

Under Section 7 of the Endangered Species Act, federal agencies are required to ensure that actions they conduct, authorize, or fund are not likely to jeopardize the continued existence of any federally-listed threatened or endangered species or result in the adverse modification of designated critical habitat.

As the federal agency charged with authorizing the discharge from this facility, EPA consulted with the United States Fish and Wildlife Service (USFWS) as requested under Section 7(a)(2) of the Endangered Species Act (ESA), for potential impacts to any federally-listed species. Based on an e-mail received from USFWS (December 5, 2006), it is EPA's understanding that no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area (receiving waters identified in this permit), and that preparation of a Biological Assessment or further consultation with USFWS under Section 7 of the Endangered Species Act is not Required.

XI. MONITORING AND REPORTING

The permittee is obligated to monitor and report sampling results to EPA and the MassDEP within the time specified within the permit. Timely reporting is essential for the regulatory agencies to expeditiously assess compliance with permit conditions.

XII. STATE PERMIT CONDITIONS

This NPDES permit is issued jointly by the U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all of the terms and conditions of the permit are, therefore, incorporated into and constitute a discharge permit by the Commissioner of the Massachusetts Department of Environmental Protection who designates signature authority to the Director of the Division of Watershed Management pursuant to M.G.L. Chap. 21 § 43.

XIII. STATE CERTIFICATION REQUIREMENTS

The staff of the Massachusetts Department of Environmental Protection have reviewed this draft permit. EPA has requested permit certification by the State pursuant to 40 CFR § 124.53 and expects that the draft permit will be certified.

XIV. PUBLIC COMMENT PERIOD AND PROCEDURES FOR FINAL DECISION

All persons, including the applicant, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available agreements and supporting material for their arguments in full by the close of the public comment period to:

U.S. EPA
Office of Ecosystem Protection
Municipal Permits Section (CMP)
One Congress Street, Suite 1100
Boston, MA 02114-2023

Prior to the close of the public comment period, any person may submit a request in writing for a public hearing to consider the draft permit to EPA and MassDEP. Such requests shall state the nature of the issues proposed to be raised in the hearing. Public hearings may be held after at least thirty days public notice whenever the Director finds that the response to this notice indicates a significant public interest. In reaching a final decision on the draft permit, the Director will respond to all significant comments and make these responses available to the public at EPA's Boston Office.

Following the close of the comment period and after a public hearing, if such a hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

XV. EPA CONTACT

Additional information concerning this draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Sunday through Thursday, excluding holidays, from the EPA contact below:

Meridith Decelle
U.S. Environmental Protection Agency
Office of Ecosystem Protection, Mailcode CMP
Once Congress Street, Suite 1100
Boston, MA 02114
Telephone: 617-918-1533

February 28, 2007
Date

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency-Region I

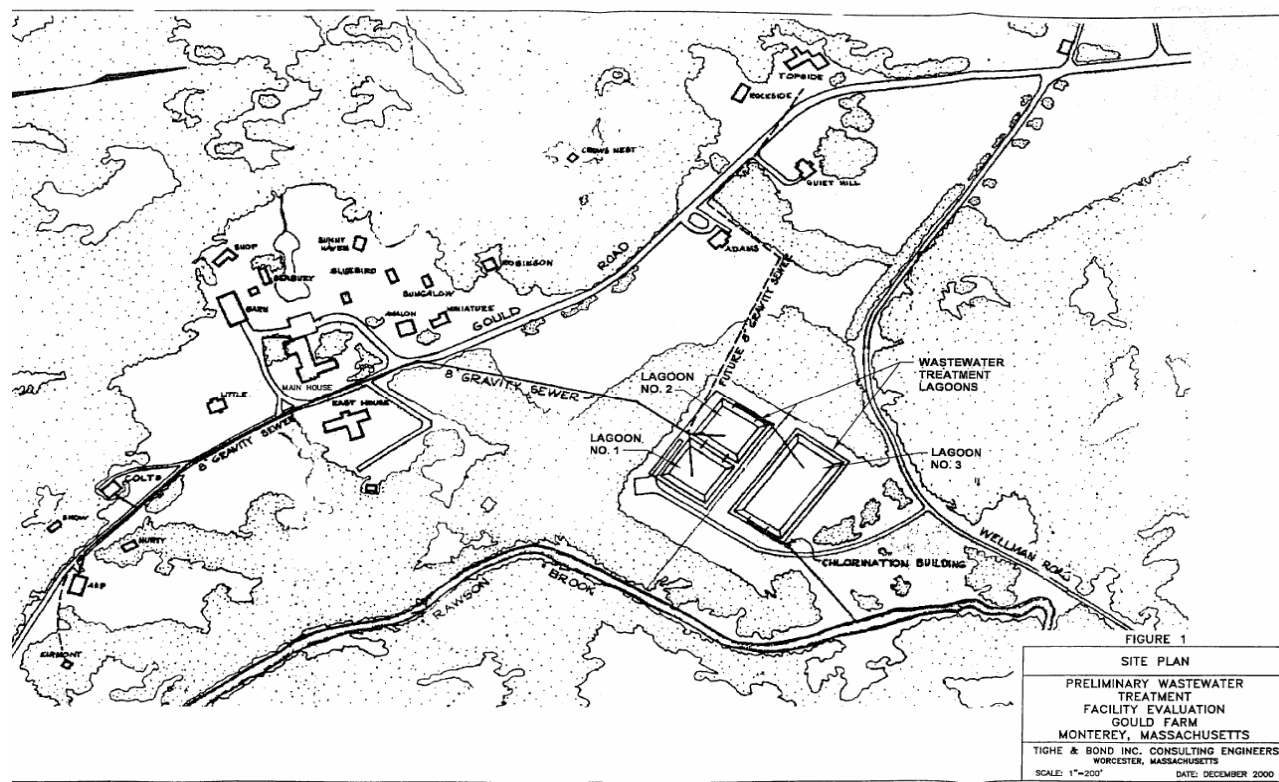


Figure 1: Location of the Gould Farm Wastewater Treatment Facility

**Attachment A: Outfall 001 Effluent Monitoring Data
(January 2004-August 2006)
NPDES Permit No. MA 0022705
Gould Farm, Monterey, MA**

Date	Flow (MGD)		BOD ₅ (mg/l)		TSS (mg/l)		Total Coliform Bacteria (cfu/100ml)		Settleable Solids (ml/l)		pH (S.U.)		Total Residual Chlorine (mg/l)	
	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Minimum	Maximum	Avg. Monthly	Maximum Daily
Existing Limits	0.012	****	30	50	30	50	1000/100	2000/100	0.1	0.3	6.00	9.00	****	****
Aug. 2006	0.006	0.0113	7	NR	1	NR	175	NR	0	0	6.47	6.83	0.28	0.59
Jul. 2006	0.004	0.0076	9	NR	4	NR	150	NR	0	0	6.60	7.35	0.41	1.03
Jun. 2006	0.008	0.0113	11	NR	<1	NR	40	NR	0	0	6.57	8.62	0.37	0.70
May. 2006	0.005	0.0113	5	NR	5	NR	30	NR	0	0	6.72	8.92	0.30	0.87
April. 2006	0.0050	0.0113	<1	NR	15	NR	200	NR	0	0	6.93	8.98	0.55	0.98
March. 2006	0.002	0.0045	16	NR	20	NR	<10	NR	0	0	6.68	7.40	0.13	1.81
Feb. 2006	0.007	0.0236	23	NR	7	NR	150	NR	0	0	6.50	6.74	0.64	1.20
Jan. 2006	0.0090	0.0236	12	NR	18	NR	50	NR	0	0	6.59	8.07	0.58	4.26
Dec. 2005	0.0070	0.0113	9	NR	16	NR	70	NR	0	0	7.40	9.62	0.54	0.92
Nov. 2005	0.007	0.0236	11	NR	14	NR	10	NR	0	0	6.97	9.51	0.61	1.28
Oct. 2005	0.0112	0.0236	6	NR	8	NR	50	NR	0	0	6.65	7.20	0.36	1.06
Aug. 2005	0.003	0.0029	18	NR	25	NR	60	NR	0	0	6.87	7.29	0.38	0.52
Jul. 2005	0.002	0.0023	9	NR	12	NR	7	NR	0	0	7.05	7.52	0.18	0.99
Jun. 2005	0.004	0.0058	19	NR	12	NR	3	NR	0	0	7.79	10.20	0.41	0.50

Attachment A
Outfall 001 Effluent Monitoring Data (January 2004-August 2006)

Date	Flow (MGD)		BOD ₅ (mg/l)		TSS (mg/l)		Total Coliform Bacteria (cfu/100ml)		Settleable Solids (ml/l)		pH (S.U.)		Total Residual Chlorine (mg/l)	
	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Avg. Monthly	Maximum Daily	Minimum	Maximum	Avg. Monthly	Maximum Daily
Existing Limits	0.012	****	30	50	30	50	1000/100	2000/100	0.1	0.3	6.00	9.00	****	****
May. 2005	0.003	0.0045	24	NR	67	NR	10	NR	0	0	7.31	10.98	0.68	1.43
April. 2005	0.006	0.0076	11	NR	11	NR	110	NR	0	0	6.70	9.54	0.54	1.31
March. 2005	0.007	0.0058	70	NR	15	NR	<10	NR	0	0	6.72	6.96	0.37	1.50
Feb. 2005	0.0051	0.0076	10	NR	5	NR	10	NR	0	0	6.85	7.00	0.46	1.30
Jan. 2005	0.0065	0.0076	11	NR	14	NR	80	NR	0	0	6.85	7.38	0.14	0.47
Dec. 2004	0.0063	0.0113	4	NR	2	NR	30	NR	0	0	7.01	7.41	0.45	1.83
Nov. 2004	0.0037	0.0113	6	NR	22	NR	<10	NR	0	0	6.95	7.26	0.42	1.04
Oct. 2004	0.0031	0.0113	10	NR	9	NR	10	NR	0	0	7.06	7.35	0.68	1.55
Sept. 2004	0.0069	0.0113	7	NR	6	NR	<10	NR	0	0	7.00	7.99	0.69	1.16
Aug. 2004	0.0088	0.0236	8	NR	7	NR	<10	NR	0	0	7.06	7.68	0.48	1.63
June. 2004	0.0064	0.0018	20	NR	8	NR	760	NR	0	0	7.76	8.39	0.67	0.80
May. 2004	0.0082	0.0113	15	NR	17	NR	180	NR	0	0	7.75	8.35	0.75	0.91
April. 2004	0.0074	0.0113	20	NR	14	NR	<1000	NR	0	0	7.81	8.91	0.43	0.85
March. 2004	0.0040	0.0113	10	NR	16	NR	<10	NR	0	0	7.70	8.02	0.16	0.23
Feb. 2004	0.0033	0.0045	15	NR	23	NR	<10	NR	0	0	7.73	7.87	0.15	0.23
Jan. 2004	0.0038	0.0236	22	NR	22	NR	<10	NR	0	0	8.38	9.08	0.16	0.29

Attachment A
Outfall 001 Effluent Monitoring Data (January 2004-August 2006)

Date	Flow (MGD)		BOD ₅ (mg/l)		TSS (mg/l)		Total Coliform Bacteria (cfu/100ml)		Settleable Solids (ml/l)		pH (S.U.)		Total Residual Chlorine (mg/l)	
	Avg. Monthly	MaximumDaily	Avg. Monthly	MaximumDaily	Avg. Monthly	MaximumDaily	Avg. Monthly	MaximumDaily	Avg. Monthly	MaximumDaily	Minimum	Maximum	Avg. Monthly	MaximumDaily
Existing Limits	0.012	****	30	50	30	50	1000/100	2000/100	0.1	0.3	6.00	9.00	****	****
Minimum	0.002	0.0018	4	NR	1	NR	3	NR	0	0	6.47	6.74	0.13	0.23
Maximum	0.011	0.0236	70	NR	67	NR	760	NR	0	0	8.38	10.98	0.68	4.26
Median	0.0058	0.0113	11	NR	14	NR	50	NR	0	0	6.96	7.93	0.43	1.01
Average	0.0056	0.0113	14	NR	14	NR	104	NR	0	0	7.08	8.15	0.43	1.11

Note: The data listed above is from discharge monitoring reports which the facility submits monthly. The frequency of monitoring varies, as some parameters are measured continuously, while others are measured once per day, once per week, or once per month.

NR = Not reported.